



surgiCam® HD Camera

Eagle eyes in the OR





surgiCam® HD Camera Eagle eyes in the OR

Introduction

High-quality daylight alone is not enough for surgical site illumination. The HD camera technology offers you more detail and thus a precise image of even the most delicate tissue structures. Thanks to the easy visualization of tissue changes, the HD camera provides the surgeon with valuable diagnostic support.

Telemedical data transmission for large-format display (as required for lecture halls, for example) also benefits from HD image sequences, as the pictures are much sharper in detail than in conventional SD formats.

All KLS Martin operating lights of the marLux® and marLED® series can be equipped with the high-resolution surgiCam® HD camera system. At your option, the camera can be mounted on a suspension arm of its own or integrated within the sterilizable central handle of the operating light. With surgiCam® HD, you get professional image quality in the “Full HD 1080i” format boasting 2 million pixels.

1. Models / Upgrade levels

- **Economy version:** for function control – zoom and image rotation – via the control panel of the operating light
- **Basic version:** for convenient control of all camera functions via a separate control unit.
Video signal and control signal interface via combination wall socket
 - HD-SDI digital video signal via BNC socket
 - Control signals via multiple DIN socket

2. Features

- 120x zoom (10x optical / 12x digital)
- Full HD video output

Economy (integrated into light head)

- Zoom and image rotation functions, controllable via the control panel of the operating light

Basic (on separate arm or integrated into light head)

- Zoom
- Image rotation (“light head” version only)
- Manual focus and auto-focus
- Manual and automatic shutter
- Servomotorized image erection function, remote-controllable
- White balance



surgiCam® HD – Eagle eyes in the OR

- For teleconsultations
- For live transmissions (for education and training)
- For documenting surgical procedures
- Maximum image quality with 2 million pixels in full HD resolution
- HD-SDI digital video signal
- 100% interference-free transmission to external storage media
- No image interference caused by electro-surgery
- 120x zoom
- Available in 2 installation versions:
 - on separate arm
 - integrated into the sterilizable central handle of the operating light, for all marLux® and marLED® lights



Feature	Technical Details
Image sensor	1/3" CMOS
Number of pixels	1920 x 1080i
Effective pixel number	approx. 2,000,000
Signal system	Standard: 1080i / 50 Hz Optional: 1080i / 59.94 Hz 720p / 50 Hz, 720p / 59.94 Hz
Aspect (height-to-width) ratio	16:9
Minimum illumination	12 lx
Signal-to-noise ratio (SNR)	> 50 dB
Zoom	10x optical / 12x digital
Focal length (zoom lens)	f = 5.1 mm to 51 mm
Shutter	1/2 to 1/10,000" s
White balance	automatic
Ambient temperature	0 °C – 45 °C (32 °F – 113 °F)
Ambient temperature during operation	0 °C – 45 °C (32 °F – 113 °F)
Power requirements: control unit / camera	100-240 V, 50/60 Hz / 24 AC/DC
Protection class	I
Type	B
Protective conductor (PE) terminal	yes
Power input: control unit / camera	max. 24 W / approx. 6 W
Camera dimensions	131 x 88 mm (length x diameter)
Weight of camera installed in light head	approx. 1 kg
Weight of camera mounted on separate arm	approx. 0.8 kg
Dimensions of control unit (complete)	270 x 120 x 280 mm (W x H x D)
Weight of control unit	approx. 2 kg
Compatibility	marLUX® and marLED® operating lights
Mark of conformity	CE
Wall socket connector standard	3 x BNC socket for video signal 1 x multiple DIN socket for control signals

Distinctive features: SD vs. HD

	SD	HD
Resolution	720 x 576 pixels	1920 x 1080 pixels
Contrast	good	excellent
Aspect (height-to-width) ratio	4:3	16:9
Color differentiation	good	excellent

KLS Martin Group

Karl Leibinger GmbH & Co. KG

78570 Mühlheim · Germany
Tel. +49 74 63 838-0
info@klsmartin.com

KLS Martin GmbH + Co. KG

79224 Umkirch · Germany
Tel. +49 76 65 98 02-0
info@klsmartin.com

Stuckenbrock Medizintechnik GmbH

78532 Tuttlingen · Germany
Tel. +49 74 61 16 58 80
verwaltung@stuckenbrock.de

Rudolf Buck GmbH

78570 Mühlheim · Germany
Tel. +49 74 63 99 516-30
info@klsmartin.com

KLS Martin France SARL

68000 Colmar · France
Tel. +33 3 89 21 66 01
france@klsmartin.com

Martin Italia S.r.l.

20059 Vimercate (MB) · Italy
Tel. +39 039 605 67 31
italia@klsmartin.com

Nippon Martin K.K.

Osaka 541-0046 · Japan
Tel. +81 6 62 28 90 75
nippon@klsmartin.com

Martin Nederland/Marned B.V.

1270 AG Huizen · The Netherlands
Tel. +31 35 523 45 38
nederland@klsmartin.com

KLS Martin L.P.

Jacksonville, FL 32246 · USA
Tel. +1 904 641 77 46
usa@klsmartin.com

Orthosurgical Implants Inc.

Miami, FL 33186 · USA
Tel. +1 877 969 45 45
sales@orthosurgical.com

Gebrüder Martin GmbH & Co. KG

Representative Office · Russia
121471 Moscow
Tel. +7 (499) 792-76-19
russia@klsmartin.com

Gebrüder Martin GmbH & Co. KG

A company of the KLS Martin Group

Ludwigstaler Str. 132 · D-78532 Tuttlingen
Postfach 60 · D-78501 Tuttlingen
Tel. +49 7461 706-0 · Fax +49 7461 706-193
info@klsmartin.com · www.klsmartin.com